

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2004-\_\_\_\_\_

NPDES NO. CA0079235

FOR  
SEWERAGE COMMISSION-OROVILLE REGION  
WASTEWATER TREATMENT PLANT  
BUTTE COUNTY

This Monitoring and Reporting Program is issued pursuant to California Water Code Sections 13383 and 13267. The Discharger shall not implement any changes to this Monitoring and Reporting Program unless and until the Regional Board or Executive Officer issues a revised Monitoring and Reporting Program.

**INFLUENT MONITORING**

Samples shall be collected at approximately the same time as effluent samples and should be representative of the influent. Influent monitoring shall include at least the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Daily Flow	mgd	Continuous	Daily
20°C BOD <sub>5</sub>	mg/L, lbs/day	24-hour Composite	Weekly
Suspended Solids	mg/L, lbs/day	24-hour Composite	Weekly
Temperature	°F	Grab	Weekly

A 24-hour composite influent sample shall be collected annually and analyzed for total cadmium, chromium, copper, lead, nickel, silver, and zinc. The influent sample shall be collected at the same time an effluent sample is obtained for analysis of priority pollutants.

**EFFLUENT MONITORING**

Effluent samples shall be collected downstream from the last connection through which wastes can be admitted into the outfall. Effluent samples should be representative of the volume and quality of the discharge. Samples collected from the outlet structure of ponds will be considered adequately composited. Time of collection of samples shall be recorded. Effluent monitoring shall include at least the following:

MONITORING AND REPORTING PROGRAM NO. R5-2004-\_\_\_\_\_  
 SEWERAGE COMMISSION-OROVILLE REGION  
 WASTEWATER TREATMENT PLANT  
 BUTTE COUNTY

-2-

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Daily Flow	mgd	Continuous	Daily
Chlorine Residual	mg/L	Continuous	Continuous <sup>a</sup>
Sulfur Dioxide Residual	mg/L	Continuous	See note b
pH <sup>b</sup>	pH units	Grab	Daily
20°C BOD <sub>5</sub>	mg/L, lbs/day	24-hour Composite	Weekly
Suspended Solids	mg/L, lbs/day	24-hour Composite	Weekly
Total Coliform Organisms	MPN/100 ml	Grab	Weekly
Temperature <sup>c</sup>	°F	Grab	Weekly
Ammonia <sup>c,d</sup>	mg/L	Grab	Quarterly
Total Copper	ug/L	Grab	Monthly
Total Lead	ug/L	Grab	Quarterly <sup>e</sup>
Total Silver	ug/L	Grab	Quarterly <sup>e</sup>
Total Zinc	ug/L	Grab	Monthly
Tetrachloroethene	ug/L	Grab	Monthly
Electrical Conductivity @ 25°C	umhos/cm	Grab	Monthly
Total Dissolved Solids	mg/L	Grab	Quarterly
Priority Pollutants <sup>f</sup>	ug/L	Grab	Annually
Acute Toxicity <sup>g</sup>	% Survival	Grab	Quarterly

<sup>a</sup> Report peak 1-hour average for each day and peak 4-day average for the month.

<sup>b</sup> Report sulfur dioxide concentration only during periods when chlorine chart indicates positive chlorine residual that is not the result of maintenance or calibration of the chlorine analyzer.

<sup>c</sup> Concurrent with biotoxicity monitoring.

<sup>d</sup> Report as both total and un-ionized ammonia.

<sup>e</sup> This testing can be ceased following the reporting of the first four quarterly sample results after adoption of the permit, provided all samples are below the CTR Criteria.

<sup>f</sup> Samples shall be analyzed for the toxic priority pollutants identified by the California Toxics Rule at 40 CFR 131.38. Effluent samples shall be collected simultaneously with receiving water samples to be analyzed for the CTR pollutants. Monitoring shall be conducted in accordance with procedures described under section "Priority Pollutant Monitoring" below.

<sup>g</sup> Rainbow trout shall be used as the test species.

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the Discharger shall monitor and record data for all of the constituents listed above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed in the schedule.

### RECEIVING WATER MONITORING

All receiving water samples shall be grab samples taken from the Feather River. Receiving water monitoring shall include at least the following:

<u>Station</u>	<u>Description</u>
R-1	500 feet upstream from the point of discharge
R-2	One quarter mile downstream from the point of discharge

<u>Constituent</u>	<u>Unit</u>	<u>Station</u>	<u>Sampling Frequency</u>
pH	pH units	R-1, R-2	Monthly
Turbidity	NTU	R-1, R-2	Monthly
Dissolved Oxygen	mg/L	R-1, R-2	Monthly
Temperature	°F (or °C)	R-1, R-2	Monthly
Total Dissolved Solids <sup>a</sup>	mg/L	R-1, R-2	Quarterly
Electrical Conductivity @ 25°C <sup>a</sup>	umhos/cm	R-1, R-2	Monthly
Total Copper <sup>a, b</sup>	ug/L	R-1, R-2	Monthly
Total Zinc <sup>a, b</sup>	ug/L	R-1, R-2	Monthly
Priority Pollutants <sup>b</sup>	ug/L	R-1	Annually

<sup>a</sup> Samples shall be taken at the same time effluent samples are taken for these constituents

<sup>b</sup> Samples shall be analyzed for the toxic priority pollutants identified by the California Toxics Rule at 40 CFR 131.38. Effluent samples shall be collected simultaneously with receiving water samples to be analyzed for the CTR pollutants. Monitoring shall be conducted in accordance with procedures described "Priority Pollutant Monitoring" below. Receiving water hardness and pH shall be determined at R-1 at the same time.

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by Stations R-1 and R-2. Attention shall be given to the presence or absence of:

- |                                 |  |
|---------------------------------|--|
| a. Floating or suspended matter | e. Visible films, sheens or coatings       |
| b. Discoloration                | f. Fungi, slimes, or objectionable growths |
| c. Bottom deposits              | g. Potential nuisance conditions           |
| d. Aquatic life                 |  |

Notes on receiving water conditions shall be summarized in the monitoring report.

### THREE SPECIES CHRONIC TOXICITY MONITORING

Chronic toxicity screening shall be conducted annually to determine whether the effluent is contributing toxicity to the Feather River. The screening shall be conducted as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms*, EPA 600/4-91-002, or latest edition. Chronic toxicity samples shall be collected at the discharge of the plant prior to its entering the Feather River. Twenty-four-hour composite samples shall be representative of the volume and quality of the discharge. Time of collection samples shall be recorded. The screening test shall be performed on effluent samples diluted 26:1 using Feather River water obtained upstream of the discharge point. Chronic toxicity screening shall include the following:

Species: Pimephales promelas, Ceriodaphnia dubia, and Selenastrum capricornutum

Frequency: Once per year.

If the results of the chronic toxicity screening indicate the waste stream may cause in-stream toxicity, the Discharger will be required to implement an effluent toxicity monitoring program in accordance with the procedures outlined in the document referenced in the above paragraph and *Technical Support Document for Water Quality-Based Toxics Control*, EPA 505/2-90-001. Appropriate deadlines for this program will be established if and when it is determined that a toxicity monitoring program is required.

### SLUDGE MONITORING

A composite sample of sludge shall be collected annually in accordance with USEPA's Publicly Owned Treatment Works (POTW) Sludge Sampling and Analysis Guidance Document, August 1989 (or most recent edition), and tested for priority pollutants.

Sampling records shall be retained for a minimum of five years. A log shall be kept of sludge quantities generated and of handling and disposal activities. The frequency of entries is discretionary; however, the log should be complete enough to serve as a basis for part of the annual report.

Annually by **30 January**, the Discharger shall submit characterization of sludge quality, including sludge percent solids and quantitative results of chemical analysis for the priority pollutants listed in 40 CFR 122 Appendix D, Tables II and III (excluding total phenols). All sludge samples shall be a composite of a minimum of twelve (12) discrete samples taken at equal time intervals over 24 hours. Suggested methods for analysis of sludge are provided in USEPA publications titled *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods* and *Test Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater*. Recommended analytical holding times for sludge samples should reflect those specified in

40 CFR 136.6.3(e). Other guidance is available in USEPA's *POTW Sludge Sampling and Analysis Guidance Document*, August 1989.

### **PRIORITY POLLUTANT MONITORING**

The State Implementation Policy (SIP) requires periodic testing for the toxic priority pollutants established by the CTR at 40 CFR 131.38. Prior to expiration of this Order, the Discharger shall conduct one sampling event and analysis for the CTR pollutants in receiving water and effluent. The Discharger is not required to perform asbestos monitoring. Receiving water samples shall be collected simultaneously and analyzed for the CTR pollutants plus pH and hardness. All analyses shall be performed at a laboratory certified by the California Department of Health Services. The laboratory is required to submit the Minimum Level (ML) and the Method Detection Limit (MDL) with the reported results for each of the analytes. Laboratory methods and limits shall be as described in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (2000), unless a variance has been approved by the Executive Officer. If, after a review of the monitoring results, it is determined that the discharge causes, has the reasonable potential to cause, or contributes to in-stream excursions above water quality objectives, this Order will be reopened and limitations based on those objectives will be included. Additionally, if pollutants are detected, but insufficient information exists to establish an effluent limit or determine if an effluent limit is necessary, then additional monitoring will be required to provide sufficient information.

All organic analyses shall be by Gas Chromatography/Mass Spectrometry (GCMS), Method 8260B for volatiles and Method 8270C for semi-volatiles. Pesticides shall be analyzed by Method 8081A. Dioxins shall be analyzed by Method 1613/8290. If organic analyses are run by Gas Chromatography (GC) methods, any detectable concentrations are to be confirmed by GCMS. Inorganics shall be analyzed by the following Methods.

Analysis for the dioxin congeners shall be performed as described in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* using High Resolution Mass Spectrometry.

Metals shall be analyzed by the USEPA methods listed below. Alternative analytical procedures may be used with approval by the Regional Board if the alternative method has the same or better detection level than the method listed.

MONITORING AND REPORTING PROGRAM NO. R5-2004-\_\_\_\_\_  
SEWERAGE COMMISSION-OROVILLE REGION  
WASTEWATER TREATMENT PLANT  
BUTTE COUNTY

-6-

Method Description	USEPA Method	Constituents
Inductively Coupled Plasma/Mass Spectrometry (ICP/MS)	1638	Antimony, Beryllium, Cadmium, Copper, Lead, Nickel, Selenium, Silver, Thallium, Total Chromium, Zinc
Cold Vapor Atomic Absorption (CVAA)	1631	Mercury
Gaseous Hydride Atomic Absorption (HYDRIDE)	206.3	Arsenic
Flame Atomic Absorption (FAA)	218.4	Chromium VI
Colorimetric	335./ 2 or 3	Cyanide

The laboratory is required to submit the Minimum Level (ML) and the Method Detection Limit (MDL) with the reported results for each constituent. The MDL should be as close as practicable to the USEPA MDL determined by the procedure found in 40 CFR Part 136. The results of analytical determinations for the presence of chemical constituents in a sample shall use the following reporting protocols:

- Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory.
- Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.
- For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration." Numerical estimates of data quality may be by percent accuracy (+ or – a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
- Sample results that are less than the laboratory's MDL shall be reported as "Not Detected" or ND.

### **PRETREATMENT PROGRAM MONITORING**

The Discharger shall submit an annual report to the Regional Board, with copies to the USEPA Regional Administrator and the SWRCB, describing the Discharger's pretreatment activities over the previous 12 months. In the event that the Discharger is not in compliance with any conditions or requirements of this Order, the Discharger shall include the reasons for the noncompliance and state how and when the Discharger shall comply with such conditions and requirements. This annual report shall be submitted by **28 February** and shall contain, but not

MONITORING AND REPORTING PROGRAM NO. R5-2004-\_\_\_\_\_  
SEWERAGE COMMISSION-OROVILLE REGION  
WASTEWATER TREATMENT PLANT  
BUTTE COUNTY

-7-

be limited to, items G.1 through 10 of Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES) dated 1 March 1991.

In addition to the information required in the annual report, the Discharger shall report quarterly the information contained in G.4. (a through g) of Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES) dated 1 March 1991. The reports shall also describe progress towards compliance with audit or pretreatment compliance inspection requirements. Reports shall be submitted within **30 days of the end of each quarter**; however, information required in the fourth quarterly report may be included as part of the annual report. If none of the aforementioned conditions exist, at a minimum, a letter certifying that all industries are in compliance and no violations or changes to the pretreatment program have occurred during the quarter must be submitted.

In addition to the Regional Board, signed copies of the reports shall be submitted to the Regional Administrator and the SWRCB at the following addresses:

Mr. Keith Silva  
U.S. Environmental Protection Agency  
Region IX, Attn: W-5-2  
75 Hawthorne Street  
San Francisco, CA 94105

Pretreatment Program Manager  
Regulatory Section  
Division of Water Quality  
State Water Resources Control Board  
P.O. Box 944213  
Sacramento, CA 94244-2130

## REPORTING

Monitoring results shall be submitted to the Regional Board by the **first day of the second month** following sample collection. Quarterly and annual monitoring results shall be submitted by the **first day of the second month** following each calendar quarter and year, respectively. California Toxics Rule/SIP monitoring shall be submitted as soon as individual results are available, with all results submitted by the date stated above.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the discharge complies with waste discharge requirements. The highest daily maximum for the month, monthly and weekly averages, and medians, and removal efficiencies (%) for BOD and Suspended Solids, should be determined and recorded.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

MONITORING AND REPORTING PROGRAM NO. R5-2004-\_\_\_\_\_  
SEWERAGE COMMISSION-OROVILLE REGION  
WASTEWATER TREATMENT PLANT  
BUTTE COUNTY

-8-

By **30 January of each year**, the Discharger shall submit a written report to the Executive Officer containing the following:

- a. The names, certificate grades, and general responsibilities of all persons employed at the WWTF (Standard Provision A.5).
- b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.
- c. A statement certifying when the flow meter and other monitoring instruments and devices used for demonstration of compliance with this order were last calibrated, including identification of who performed the calibration (Standard Provision C.6).
- d. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.

The Discharger may also be requested to submit an annual report to the Regional Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision D.6.

The Discharger shall implement the above monitoring program on the first day of the month following effective date of this Order.

Ordered by: \_\_\_\_\_  
THOMAS R. PINKOS, Executive Officer

\_\_\_\_\_  
(Date)